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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,371	03/01/2004	Nitin Desai	5853-426	9364
30448 7590 07/09/2008 AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188				
EXAMINER				
CHANG, JUNGWON				
ART UNIT		PAPER NUMBER		
2154				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,371

Applicant(s)

DESAI ET AL.

Examiner

JUNGWON CHANG

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date 6/10/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are presented for examination.
2. IDS filed on 6/10/04 has been considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner et al, (US 2007/0033261), hereinafter Wagner, in view of Ekberg et al, (US 2005/0058108), hereinafter Ekberg.
5. As to claim 1, Wagner discloses the invention as claimed, including a communication system comprising a plurality of portable devices being communicatively linked via a wireless network such that each said portable device functions in a peer-to-peer fashion, wherein each said portable device includes a communication architecture comprising (page 4, 0081, "peer-to-peer network"):

an application configured to control service discovery, usage, and advertising (page 1, 0011, "services advertised for service discovery"; 0014-0016, "usage pattern");

a service manager configured to discover services provided by other ones of said portable devices, and register and advertise services provided by said portable device within which said service manager is disposed, under control of said application (fig. 1, "registration & advertisement"; page 5, 0083); and

a micro-hypertext transfer protocol server configured to send and receive queries to facilitate service discovery, usage, and advertising (fig. 5; page 5, 0095-0099).

6. Although Wagner discloses peer-to-peer network, Wagner does not specifically disclose ad-hoc wireless network. Ekberg discloses ad-hoc wireless network (page 1, 0002; page 2, 0009-0010). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Wagner and Ekberg because Ekberg's ad-hoc wireless network would enhance the wireless network system of Wagner by adding the short range wireless system that is constructed quickly with wireless devices joining and leaving the network, as taught by Ekberg (page 1, 0004).

7. As to claim 2, Wagner discloses the system of claim 1, said service manager having a service registry specifying a hierarchy of services available from the portable computing device within which said service manager is disposed, and specifying services, within said hierarchy, that have been discovered by said portable device (fig. 6; figs. 12-13).

8. As to claim 3, Wagner discloses the system of claim 2, wherein said portable

device receives a service discovery message from a client device and a response from a server device, said portable device comparing the response from the server device with the service registry and responding to said service discovery message only if said service registry specifies different services than specified in the response from the server device (page 5, 0095 - page 6, 0113).

9. As to claim 4, Wagner discloses the system of claim 2, said application comprising a user interface, wherein said hierarchy of services specified by said service registry correlates directly with said user interface (figs. 6, 12-13; page 5, 0095 - page 6, 0113) .

10. As to claim 5, Wagner discloses the system of claim 1, wherein said service manager interacts with a messaging layer of said portable device, said messaging layer being in communication with a transport layer of said portable device (page 1, 0002-0006, "mobile").

11. As to claim 6, Wagner discloses the system of claim 1, wherein each service specified within said service registry has an expiration attribute, said service manager configured to purge said service registry of services that have expired (fig. 1, "registration & advertisement"; page 5, 0083).

12. As to claim 7, Wagner discloses the system of claim 1, wherein at least one of

said plurality of portable devices is configured to transmit a service discovery message to a fixed multicast group (S10, fig. 5).

13. As to claim 8, Wagner discloses the system of claim 7, wherein, upon receiving the service discovery message, at least one other of said plurality of portable devices locates a service matching said service discovery message and transmits a service advertisement message specifying one or more services matching said service discovery message (page 1, 0009, "best match of service attributes").

14. As to claim 9, Wagner discloses the system of claim 1, wherein at least one of said portable devices includes a service, said service comprising: a service object configured to perform said service and interact with said application disposed within another one of said plurality of portable devices having requested said service; and a service description including information pertaining to properties of said service (fig. 5).

15. As to claim 10, Wagner discloses the system of claim 1, wherein said portable device waits a random time period prior to sending a response to a received service discovery request (fig. 5).

16. As to claim 11, it is rejected for the same reasons set forth in claim 1 above. In addition, Wagner discloses within a portable device, transmitting a service discovery message to a fixed multicast group over said network (fig. 5);

receiving a service advertising message from at least one other portable device of said fixed multicast group (page 1, 0011, "services advertised for service discovery"); matching a service specified by the service advertising message with a location within a service registry of the portable device (page 1, 0009, "best match of service attributes"); and incorporating the matched service within the service registry, wherein the matched service specifies a network address for retrieving information about the matched service (page 5, 0095 – page 6, 0109).

17. As to claim 12, Wagner discloses the method of claim 11, further comprising: transmitting a query to the network address of the matched service requesting additional information about the matched service; receiving the additional information; and invoking the matched service (fig. 5; page 5, 0095 – page 6, 0109).

18. As to claim 13, it is rejected for the same reasons set forth in claim 1 above. In addition, Wagner discloses receiving a response to the service discovery message from a second server device; comparing the response from the second server device with the response of the first server device; and selectively sending the response of the first server device according to the comparing step (page 1, 0009, "best match").

19. As to claims 14-20, they are rejected for the same reasons set forth in claims 1-13 above.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Ekberg, US 2005/0058109, Ekberg, US 2004/0087274, Yang et al, US 7,333,464, Saulpaugh et al, US 7,395,333, Ekberg, US 6,909,721, Kakivaya et al, US 2004/0267876 disclose method and system for ad-hoc service discovery protocol.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNGWON CHANG whose telephone number is (571)272-3960. The examiner can normally be reached on M-F 6:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/

Primary Examiner, Art Unit 2154

July 6, 2008